

IN THE CLAIMS

1. (Currently Amended) A platform assembly that supports a vibration-sensitive payload, comprising:

a table that has a first surface coupled to a vibration-sensitive payload, a second surface, and an inner core located between said first and second surfaces; and

at least one vibration sensor located within said inner core.

2. (Original) The assembly of claim 1, wherein said first surface extends along a first plate and said vibration sensor is attached to said first plate.

3. (Original) The assembly of claim 1, further comprising an electrical connector attached to an external surface of said table and coupled to said vibration sensor.

4. (Original) The assembly of claim 1, further comprising a damper located within said inner core.

5. (Original) The assembly of claim 4, wherein said damper includes an active actuator that is coupled to said vibration sensor.

6. (Original) The assembly of claim 5, further comprising a control circuit coupled to said vibration sensor and said active actuator.

7. (Original) The assembly of claim 1, further comprising a monitor coupled to said vibration sensor.

8. (Original) The assembly of claim 1, further comprising a honeycomb core within said inner core.

9. (Original) The assembly of claim 6, wherein said control circuit causes said active actuator to create an active force that emulates an effect of a viscous damper in a frequency domain encompassing a plurality of natural frequencies of a flexural vibration of said first surface.

10. (Cancelled)

11. (Currently Amended) A platform assembly that supports a vibration-sensitive payload, comprising:

a table that has a first surface coupled to the vibration-sensitive payload, a second surface and an inner core located between the first and second surfaces; and

Attorney Docket No. 155803-0311
Amendment and Resp to OA

vibration sensor means for sensing a vibration of said first surface located within said inner core.

12. (Original) The assembly of claim 11, wherein said first surface extends along a first plate and said vibration sensor means includes a vibration sensor attached to said first plate.

13. (Original) The assembly of claim 11, further comprising an electrical connector attached to an external surface of said table and coupled to said vibration sensor means.

14. (Original) The assembly of claim 11, further comprising a damper located within said inner core.

15. (Original) The assembly of claim 14, wherein said damper includes an active actuator that is coupled said vibration sensor means.

16. (Original) The assembly of claim 15, further comprising a control circuit coupled to said vibration sensor and said active actuator.

17. (Original) The assembly of claim 11, further comprising a monitor coupled to said vibration sensor means.

18. (Original) The assembly of claim 11, further comprising a honeycomb core within said inner core.

19. (Original) The assembly of claim 16, wherein said control circuit causes said active actuator to create an active force that emulates an effect on a viscous damper in a frequency domain of a flexural vibration of said first surface.

20-25 (Cancelled)

26. (New) A platform assembly that supports a vibration-sensitive payload, comprising:

a table having a first surface configured to support a vibration-sensitive payload, a second surface, and an inner core located between the first and second surfaces;

one or more vibration sensors located within the inner core;

a damper located within the inner core; and

a monitor in communication with the one or more sensors and the dampener, the monitor configured to receive vibration information from the one or more sensors and provide an excitation

signal to the damper.

27. (New) The device of claim 26 further comprising a control circuit coupled to the vibration sensor and the active actuator.

28. (New) The device of claim 27 wherein the damper is configured to apply an active force that emulates an effect of a viscous damper in a frequency domain encompassing a plurality of natural frequencies of a flexural vibration of the first surface in response to the excitation signal from the control circuit in communication with the monitor.

29. (New) The device of claim 26 further comprising a honeycomb core within said inner core.